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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,639	12/29/2003	John Erickson	12104	5719
28484 7590 08/04/2008 BASF AKTIENGESELLSCHAFT CARL-BOSCH STRASSE 38, 67056 LUDWIGSHAFEN LUDWIGSHAFEN, 69056 GERMANY				
EXAMINER				
LEE, EDMUND H				
ART UNIT		PAPER NUMBER		
1791				
NOTIFICATION DATE		DELIVERY MODE		
08/04/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/747,639

Applicant(s)

ERICKSON ET AL.

Examiner

EDMUND H. LEE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2008.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-45 and 47-55 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,3-45 and 47-55 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. In view of Applicant's remarks filed 7/1/08, the finality of the final Office action mailed 5/1/08 has been withdrawn.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
3. Claims 1,3,9,12,14,16,17,21,22,43,44,45,47,52,53,54, and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Horacek et al (USPN 4389454). Horacek et al teaches the claimed process and product-by-process as evidenced at col 2, ln 35-col 3, ln 15; col 7, lns 5-35; col 8, ln 38-col 9, ln 11; and figs 1-3.
4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
5. Claims 4,5,6,7,8,10,11,13,15,18,19,20, 48,49,50, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horacek et al (USPN 4389454). The above teachings of Horacek et al are incorporated hereinafter. In regard to claim 4, material formulation is well-known in the molding art as an important molding parameter and the desired amount of each component would have been obviously and readily determined

through routine experimentation by one having ordinary skill in the art at the time the invention was made. Further, the claimed amount is generally well-known in the molding art and it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed amount of the hydroxide in the process of Horacek et al in order to ensure good bonding. In regard to claim 5, such is taught by Horacek et al (modified) since Horacek et al teach mixing the hydroxide into the paint composition prior to applying the paint composition to the mold (col 2, ln 35-col 3, ln 15; col 7, lns 5-35; col 8, ln 38-col 9, ln 11; and figs 1-3) . In regard to claims 6 and 7, such is well-known in the molding as an effective means for applying a material. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to spray the hydroxide onto the paint layer of Horacek et al in order to reduce molding complexity. In regard to claims 8 and 10-11, the use of a specific material is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed materials are well-known substitutes for polyurethane-based material. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed material as a substitute for the PU of Horacek et al in order to meet consumer needs. In regard to claim 12, such is well-known in the molding art as a conventional step to aid in the removal of molded parts. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply a mold release to the mold of Mohiuddin in order to achieve the above result. In regard to claim 13, such is well-

known in the molding as an effective means for applying a material. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to spray the hydroxide onto the paint layer of Horacek et al in order to reduce molding complexity. In regard to claim 15, such are well-known in the molding art as an effective means for initiating the formation of polyurethane. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to initiate the formation of the polyurethane of Horacek et al by one of the claimed methods in order improve the process efficiency of Horacek et al. In regard to claim 18, Horacek et al teach all of the claimed limitations expect reaction injection molding the polyurethane layer. Reaction injection molding PU is well-known in the molding art for its efficiency. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reaction injection mold the PU of Horacek et al in order to reduce cycle time without compromising quality. In regard to claims 19-20, such are well-known in the molding art as an effective means for initiating the formation of polyurethane. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to initiate the formation of the polyurethane of Horacek et al by one of the claimed methods in order improve the process efficiency of Horacek et al.

6. Claims 23-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horacek et al (USPN 4389454). In regard to claim 23, Horacek et al teach the claimed limitations (col 2, ln 35-col 3, ln 15; col 7, lns 5-35; col 8, ln 38-col 9, ln 11; and figs 1-3) except using a water-based latex composition. The use of a specific material is a mere

obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed material is a well-known substitute for polyurethane-based materials. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a water-based latex as a substitute for the PU of Horacek et al in order to meet consumer needs. In regard to claim 24, the use of a specific material is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed material is well-known substitute for sodium hydroxide. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use potassium hydroxide instead of sodium hydroxide since they are substitutable alternatives. In regard to claim 25, material formulation is well-known in the molding art as an important molding parameter and the desired amount of each component would have been obviously and readily determined through routine experimentation by one having ordinary skill in the art at the time the invention was made. Further, the claimed amount is generally well-known in the molding art and it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed amount of the hydroxide in the process of Horacek et al in order to ensure good bonding. In regard to claims 26-27, such are taught by Horacek et al (col 2, ln 35-col 3, ln 15; col 7, lns 5-35; col 8, ln 38-col 9, ln 11; and figs 1-3). In regard to claim 28, reaction injection molding PU is well-known in the molding art for its efficiency. Thus, it would have been obvious to one

of ordinary skill in the art at the time the invention was made to reaction injection mold the PU of Horacek et al in order to reduce cycle time without compromising quality. In regard to claim 29, such is taught by Horacek et al (modified) (col 2, ln 35-col 3, ln 15; col 7, lns 5-35; col 8, ln 38-col 9, ln 11; and figs 1-3). In regard to claim 30, Horacek et al (modified) teaches the claimed limitations except mixing in a closed mold. Mixing components within a mold as opposed to outside a mold is well-known in the molding art as an effective means for initiating the formation of polyurethane. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to initiate the formation of the polyurethane of Horacek et al within the mold in order to improve the process efficiency of Horacek et al. In regard to claim 31, such is taught by Horacek et al (col 2, ln 35-col 3, ln 15; col 7, lns 5-35; col 8, ln 38-col 9, ln 11; and figs 1-3). In regard to claim 32, such is taught by Horacek et al (modified) (col 2, ln 35-col 3, ln 15; col 7, lns 5-35; col 8, ln 38-col 9, ln 11; and figs 1-3).

7. Claims 33-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horacek et al (USPN 4389454). In regard to claim 23, Horacek et al teach the claimed limitations (col 2, ln 35-col 3, ln 15; col 7, lns 5-35; col 8, ln 38-col 9, ln 11; and figs 1-3) except using a water-based latex composition. The use of a specific material is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed material is a well-known substitute for polyurethane-based materials. Thus, it would have been obvious to one of ordinary skill

in the art at the time the invention was made to use a water-based latex as a substitute for the PU of Horacek et al in order to meet consumer needs. In regard to claim 34, the use of a specific material is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed material is well-known substitute for sodium hydroxide. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use potassium hydroxide instead of sodium hydroxide since they are substitutable alternatives. In regard to claim 35, material formulation is well-known in the molding art as an important molding parameter and the desired amount of each component would have been obviously and readily determined through routine experimentation by one having ordinary skill in the art at the time the invention was made. Further, the claimed amount is generally well-known in the molding art and it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed amount of the hydroxide in the process of Horacek et al in order to ensure good bonding. In regard to claims 36-37, such are taught by Horacek et al (col 2, In 35-col 3, In 15; col 7, Ins 5-35; col 8, In 38-col 9, In 11; and figs 1-3). In regard to claim 38, reaction injection molding PU is well-known in the molding art for its efficiency. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reaction injection mold the PU of Horacek et al in order to reduce cycle time without compromising quality. In regard to claim 39, such is taught by Horacek et al (modified) (col 2, In 35-col 3, In 15; col 7, Ins 5-35; col 8, In 38-col 9, In 11; and figs 1-3). In regard to claim 40, Horacek et

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al (modified) teaches the claimed limitations except mixing in a closed mold. Mixing components within a mold as opposed to outside a mold is well-known in the molding art as an effective means for initiating the formation of polyurethane. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to initiate the formation of the polyurethane of Horacek et al within the mold in order to improve the process efficiency of Horacek et al. In regard to claim 41, such is taught by Horacek et al (col 2, ln 35-col 3, ln 15; col 7, lns 5-35; col 8, ln 38-col 9, ln 11; and figs 1-3). In regard to claim 42, such is taught by Horacek et al (modified) (col 2, ln 35-col 3, ln 15; col 7, lns 5-35; col 8, ln 38-col 9, ln 11; and figs 1-3).

8. Claims 48,49, 50, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horacek et al (USPN 4389454). The above teachings of Horacek et al are incorporated hereinafter. In regard to claim 48, material formulation is well-known in the molding art as an important molding parameter and the desired amount of each component would have been obviously and readily determined through routine experimentation by one having ordinary skill in the art at the time the invention was made. Further, the claimed amount is generally well-known in the molding art and it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed amount of the hydroxide in the process of Horacek et al in order to ensure good bonding. In regard to claim 49, such is taught by Horacek et al (modified) since Horacek et al teach mixing the hydroxide into the paint composition prior to applying the paint composition to the mold (col 2, ln 35-col 3, ln 15; col 7, lns 5-

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35; col 8, ln 38-col 9, ln 11; and figs 1-3) . In regard to claims 50 and 51, such is well-known in the molding as an effective means for applying a material. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to spray the hydroxide onto the paint layer of Horacek et al in order to reduce molding complexity.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following US patents teach the state of the art: 5017634, 4356230, 4314962, 3378531, 3047540, 4800123, and 4486370.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H. LEE whose telephone number is 571.272.1204. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on 571.272.1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EDMUND H. LEE
Primary Examiner
Art Unit 1791

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